



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/755,365

01/05/2001

Adriaan Johannes Rijnberg

PHNL000014

3887

24737

7590

10/31/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

CORRIELUS, JEAN B

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,365

Applicant(s)

RIJNBERG ET AL.

Examiner

Jean B. Corrielus

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,13-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 5,9 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. In view of the appeal brief filed on 9/19/06, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Claim Rejections - 35 USC § 103

2. Claims 1, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art page 1, lines 1-24 in view of Japanese Patent No. JP-10083200A (Japanese Patent).

As per claims 1 and 7, Applicant admitted prior art page 1, lines 1-24 teaches a method and apparatus for transmitting a digital information signal via a transmission medium, including: input means for receiving the digital information signal, adaptive prediction filter means adapted to derive a prediction signal from the digital information

Art Unit: 2611

signal in dependence on an array of prediction filter coefficients; first signal combination means for combining the digital information signal and said prediction signal so as to obtain a residual signal; encoding means for encoding said residual signal so as to obtain an encoded signal, coefficient generator means for generating an array of filter coefficients $A[i]$ in response to the digital information signal, i being an integer for which it holds that $0 \neq i < p$, where p is a variable; output means for supplying the encoded signal to an output terminal for transmission via the transmission medium. See applicants admitted prior art page lines 1-24.

However, Applicants admitted prior art page lines 1-24 does not teach or fairly suggest the further limitations of a smoothing means for smoothing the array of filter coefficient $A[i]$ so as to obtain the array of prediction filter coefficients for supply to the adaptive prediction filter means. In the same field of endeavor, Japanese Patent No. JP-10083200A (Japanese Patent thereafter) teaches fig. 1, a smoothing means 35 for smoothing the array of filter coefficient, so as to obtain an array (series) of prediction filter coefficients for supply to LPC filter 3 (adaptive prediction filter means). Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in applicant's admitted prior art in order to perform spectral smoothing on the LPC coefficients so as to enhanced signal reproduction see abstract.

As per claim 13, see claim 1. In addition, the admitted prior art page 4, lines 26-28 teaches the encoded signal is transmitted on a transmission medium.

Art Unit: 2611

3. Claims 2-4, 6 and 14-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art page 1, lines 1-24 in view of Japanese Patent No. JP-10083200A (Japanese Patent) further in view of Shimoni et al US Patent No. 4,777,620.

As per claim 2, as applied to claims 1 and 7 above, applicant admitted prior art page 1, lines 1-24 and Japanese Patent No. JP-10083200A (Japanese Patent) disclose the invention substantially as claimed but do not explicitly teach that the smoothing means (includes) is a low pass filter. However, it is well known in the art to implement a smoothing means as a LPF. For instance, Shimoni et al teaches the implementation of a smoothing means as a low pass filter. See col. 1, line 66-col. 2, line 2. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Applicant admitted prior art and Japanese Patent No. JP-0083200A (Japanese Patent) in order to ensure that high frequency content of the data is reduce thus improving the predictability of the predictor see col. See col. 1, line 66-col. 2, line 2.

As per claims 3 and 4, it is well established in the art to implement a lowpass filter as IIR and FIR (see for instance Japanese patent JP 357079725A, abstract). Given that fact, it would have been obvious to one skill in the art to implement the lowpass filter as IIR and FIR so as to satisfy system design requirements.

As per claim 6, it is well known in the art to store buffer the signal in a storage device (record carrier) prior to transmission. Given that, it would have been obvious to one skill in the art to store buffer the signal in a storage device (record carrier) prior to transmission so as to avoid data lost in the event of transmission failure.

As per claim 14 see claim 2.

As per claims 15 and 16, see claims 3 and 4.

As per claim 18, the smoothed coefficients generated are prediction filter coefficients see abstract.

Allowable Subject Matter

4. Claims 5, 9 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 9/19/06 have been fully considered but they are not persuasive. It is alleged that there is no disclosure in Shimoni of generating an array of filter coefficients in response to the information signal or any smoothing of filter coefficients. Such comment is moot since such limitations are taught by the primary and/or secondary reference. It is further alleged that there is no disclosure in Shimoni to implement the lowpass filter as IIR filter or FIR filter. However, as evidence by Japanese patent No. JP357079725A, it is well known in the art for a low pass filter to be implemented as a IIR and FIR given that fact one skill in the art would have been motivated to configure the low pass filter as such for the reason set forth above.

Conclusion.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-

Art Unit: 2611

3020. The examiner can normally be reached Monday-Thursday from 10:00AM to 5:00 PM.

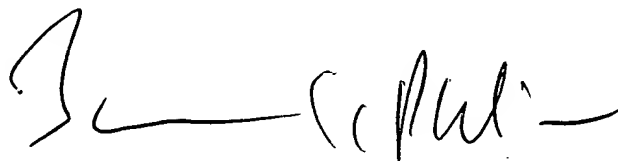
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean B Corielus
Primary Examiner
Art Unit 2611

10:30:06

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


JAY K. PATEL
SUPERVISORY PATENT EXAMINER